

REMARKS

Claims 1-32 are pending in the application. Claims 1, 7, 9, 17, 23, 25, and 28 have been amended to further define the invention. No new matter has been added by these amendments.

REJECTIONS UNDER 35 USC 103

Claims 9-14, 16-18, 20-25, 27-28, 30 and 32 were rejected under 35 USC 103 as being unpatentable over US Patent No. 6,556,704 to Chen in view of US Patent No. 7,61,507 to Tuomi.

Chen discloses a method and system for generating a depth map from a plurality of scenes useful in image editing (see abstract). Multiple cameras are required to generate the depth map (see Figure 1). Tuomi discloses an anti-aliasing method for video applications. Under Tuomi, subpixel data is not stored in a frame buffer to save on memory requirements.

The present application is concerned with adjusting camera settings through a single image capture device as specified in amended claims 9, 17, and 25. Claim 9, as amended includes the feature of capturing the image through a single image capture device. As mentioned above, Chen requires a plurality of images and multiple image capture devices. Accordingly, Chen fails to teach each of the features of amended claim 9. Claims 10-16 depend from claim 9 and are allowable for at least the above stated reasons.

Claim 17 has been amended to define the image characteristics as gain exposure and brightness. None of the references that the Examiner has cited are related to adjusting camera settings based on whether an object is in the foreground or background of an image. The Examiner refers to column 7, lines 29-34 of Chen as clearly disclosing brightness when mentioning intensity image. Applicants respectfully disagree with this assertion as the cited section refers to determining feature points to estimate the depth of a 3D point in a scene. The cited section has to do with generating a depth map from multiple camera images and nowhere is an image capture device setting adjusted for a characteristic such as focus, gain, brightness, exposure, etc., based upon a bit value of a depth mask. Applicants respectfully request that the Examiner clarify where the feature points of Chen are adjusted based upon a bit value of a depth mask if this rejection is maintained. The cited references may internally analyze the image data for rendering purposes, but nowhere do the cited references make any adjustments to image captured device settings, e.g., the camera settings controlling the focus, gain, brightness, and exposure, as specified in claims 17 and 25. Claims 18-24 and claims 26-32 depend from claims 17 and 25, respectively, and are allowable for at least these reasons.

Applicants also disagree with the Examiner's assertion that one skilled in the art would have combined Chen and Tuomi as suggested by the Examiner. The Examiner asserts that it would have been obvious to adjust the pixel values relating to the depth value or a Z-value. The motivation is provided by the reduced amount of memory stored within the frame buffer because on the color values for the anti-aliasing mask need to be stored. Chen discusses generating a depth map. Tuomi deals with a method for anti-aliasing image data. The depth mask of Chen is not rendered but the Examiner seems to

assert that the rendering technique of Tuomi may be applied to Chen. Chen does not perform any anti-aliasing or has no need for an anti-aliasing technique and to assert that the features of Tuomi would reduce the memory necessary is incorrect since Chen does not subsample data and subpixel data is never stored in a frame buffer under Chen.

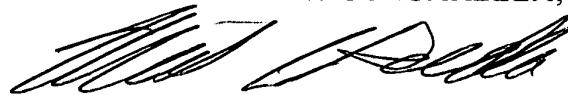
Claims 1-5 and 7-8 were rejected under 35 USC 103 as being unpatentable over Gvilli in view of US Patent No. 7,61,507 to Tuomi. Claim 1, as amended, further defines the device settings that are adjusted. The Examiner acknowledges that Gvilli does not disclose the feature of adjusting image capture device parameters and relies on Tuomi for this feature. As mentioned above, Tuomi is directed to anti-aliasing and corresponding Z-buffer graphics issues. Tuomi never discusses adjusting image capture device settings as specified in claim 1. That is, the rendering operations discussed in Tuomi are unrelated to adjusting image device settings, e.g., on a camera, based on a depth mask generated as specified in claim 1. Claim 1 and dependent claims 2-8 are patentable for at least the above stated reasons. Furthermore, with regard to focus, the Examiner asserts that page 568, lines 1-3 disclose the image capture device being focus. The cited section refers to zooming a lens to adjust a field of view. There is nothing in this section that discloses adjusting the focus according to a bit value of a depth mask as specified in claim 1. Applicants respectfully request that the Examiner clarify how the zoom in Gvilli is adjusted based upon a bit value of a depth mask if this rejection is maintained.

Applicants also note that the references cited with regard to claims 6, 15, 19, 26, 29, and 31 do nothing to cure the above noted deficiencies. As each of claims 6, 15, 19, 26, 29, and 31 are dependent claims, these claims are allowable for at least the above stated reasons corresponding to respective independent claims.

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Office action response dated July 9, 2007
Responsive to Office Action Dated March 9, 2007

In view of the foregoing, Applicants respectfully submit that all of the pending claims are in condition for allowance. A notice of allowance is respectfully requested. In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at **(408) 774-6921**. If any fees are due in connection with the filing of this paper, then the Commissioner is authorized to charge such fees to Deposit Account No. 50-0805 (Order No. SONYP031). A copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
MARTINE PENILLA & GENCARELLA, LLP



Michael L. Gencarella
Registration No. 44,703

710 Lakeway Drive, Suite 200
Sunnyvale, California 94085
Telephone: (408) 749-6900
Customer No. 25920